

REMARKS

By the present amendment, independent claims 1, 8 and 18 have been amended to clarify features of the present invention with claim 18 being amended to incorporate substantially the features of dependent claim 20 therein, with claims 3 and 20 being canceled. Additionally, minor informalities in claims 15, 16, 17, 19 and 21 - 22 have been corrected including the informality noted by the Examiner in claim 21 such that the objection to claim 21 should now be overcome.

As to the rejection of claims 1 - 15 under 35 USC 102(b) as being anticipated by US Patent No. 6,047,083 issued to Mizuno; the rejection of claims 18 - 22 under 35 USC 102(e) as being anticipated by US Patent No. 6,539,106 issued to Gallarda et al; and the rejection of claims 13 and 16 - 17 under 35 USC 103(a) as being unpatentable over Mizuno and US Patent No. 6,539,106 issued to Gallarda; such rejections are traversed insofar as they are applicable to the present claims and reconsideration and withdrawal of the rejections are respectfully requested.

As to the requirements to support a rejection under 35 USC 102, reference is made to the decision of In re Robertson, 49 USPQ 2d 1949 (Fed. Cir. 1999), wherein the court pointed out that anticipation under 35 U.S.C. §102 requires that each and every element as set forth in the claim is found, either expressly or inherently described in a single prior art reference. As noted by the court, if the prior art reference does not expressly set forth a particular element of the claim, that reference still may anticipate if the element is "inherent" in its disclosure. To establish inherency, the extrinsic evidence "must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill." Moreover, the court pointed out that inherency, however, may not be established by probabilities or

possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.

As to the requirements to support a rejection under 35 USC 103, reference is made to the decision of In re Fine, 5 USPQ 2d 1596 (Fed. Cir. 1988), wherein the court pointed out that the PTO has the burden under '103 to establish a prima facie case of obviousness and can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references. As noted by the court, whether a particular combination might be "obvious to try" is not a legitimate test of patentability and obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. As further noted by the court, one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.

Furthermore, such requirements have been clarified in the recent decision of In re Lee, 61 USPQ 2d 1430 (Fed. Cir. 2002) wherein the court in reversing an obviousness rejection indicated that deficiencies of the cited references cannot be remedied with conclusions about what is "basic knowledge" or "common knowledge".

The court pointed out:

The Examiner's conclusory statements that "the demonstration mode is just a programmable feature which can be used in many different device[s] for providing automatic introduction by adding the proper programming software" and that "another motivation would be that the automatic demonstration mode is user friendly and it functions as a tutorial" do not adequately address the issue of motivation to combine. This factual question of motivation is immaterial to patentability, and could not be resolved on subjected belief and unknown

authority. It is improper, in determining whether a person of ordinary skill would have been led to this combination of references, simply to "[use] that which the inventor taught against its teacher."... Thus, the Board must not only assure that the requisite findings are made, based on evidence of record, but must also explain the reasoning by which the findings are deemed to support the agency's conclusion. (emphasis added)

In accordance with the present invention as now set forth in each of independent claims 1, 8 and 18, a simultaneous display is effected on a display screen of defect candidate distribution data in a wafer map format and an enlarged image of a defect candidate. That is, as shown in Figure 8 of the drawings of this application, the display screen includes a map display portion 55 and an image display portion 56, wherein the map display portion 55 displays defect candidate distribution data, and in the image display portion 56 displays an enlarged image of a defect candidate as, for example, selected by the current location symbol 59.

Applicants submit that irrespective of the position set forth by the Examiner, neither Mizuno nor Gallarda et al discloses or teaches such claimed features in the sense of 35 USC 102 or 35 USC 103.

Turning first to Mizuno, while the Examiner contends that Mizuno displays an image of the defect candidate on the display screen referred to in column 5, lines 23 - 51 and that Mizuno displays a defect candidate location data in map format on the display screen referring to column 4, lines 35 - 40 of such patent, applicants submit that Mizuno fails to disclose or teach simultaneous display on a display screen of defect candidate distribution data in a wafer map format and an enlarged image of a defect candidate. Applicants note that Fig. 6A of Mizuno shows specified points of defects in a map format on a wafer while Fig. 6B shows the type of defect in accordance with classification thereof wherein the type of defect as represented by the numbers in rectangles or triangles at the specified locations in the map format as

shown in Fig. 6B does not represent an image of a defect or an enlarged image of a defect as now recited in the claims of this application. Furthermore, there is no disclosure or teaching in Mizuno of simultaneous display on a display screen of both defect candidate distribution data in a wafer map format and an enlarged image of a defect candidate as recited in each of the independent claims of this application.

Thus, applicants submit that each of independent claims 1, 8 and 18 and the dependent claims patentably distinguish over Mizuno in the sense of 35 USC 102 as well as 35 USC 103 and all claims patentably distinguish thereover. With respect to the dependent claims, whether or not Mizuno discloses classification of defects, Mizuno fails to disclose the simultaneous display of two different types of specified information in the manner set forth and applicants submit that it cannot be considered obvious in the sense of 35 USC 103 to provide the recited features. Accordingly, applicants submit that all claims patentably distinguish over Mizuno and should be considered allowable at this time.

With respect to Gallarda et al, as noted above, the features of dependent claim 20 have been essentially incorporated into parent claim 18 while clarifying such features and applicants submit that Gallarda et al also fails to disclose in the sense of 35 USC 102 or teach in the sense of 35 USC 103 the simultaneous display of defect candidate distribution data in a wafer map format and an enlarged image of a defect candidate on a display screen.

In applying Gallarda et al to the claimed invention, the Examiner contends that Gallarda et al discloses display unit display both an image of a defect detected by the defect candidate-data processing unit and a map which includes distribution of the detected defect on the substrate referring to column 6, lines 30 - 35 of such patent. Furthermore, the Examiner refers to column 5, lines 31 - 34 of Gallarda et al

as discloses the display unit displays an image of a defect, which is pointed out on the map displayed on the screen. Contrary to the position set forth by the Examiner, applicants note that column 6, lines 30 - 35 of Gallarda et al merely indicates that results of defect detection, such as defect locations, size, type, etc. are saved to a database and/or are reported and the image is optionally also saved for later reference with at step 345, intermediate images and results, such a cap of defects and statistics about defect location, size, type, etc. are optically displayed for monitoring by a human operator on a display screen 350. Column 5, lines 31 - 34 merely indicate that optional computer subsystem 230 with display 235 is provided to enable monitoring and review by a human operator a process as an image is related to wafer inspection and verification operations. While Figure 4 of Gallarda et al discloses a map display on a display screen, and while Gallarda et al enables selective types of displays on a display screen, there is no disclosure or teaching in Gallarda et al, irrespective of the Examiner's contention of effecting simultaneous display of defect candidate distribution data in a wafer map format and an enlarged image of a defect candidate on a display screen wherein the enlarged image of a defect candidate is one of the defect candidates displayed on the wafer map format, as recited in claim 18 or the other features as recited in independent claims 1 and 8 and the dependent claims thereof. Thus, applicants submit that all claims patentably distinguish over Gallarda et al in the sense of 35 USC 102 and 35 USC 103 and should be considered allowable thereover.

With regard to the proposed combination of Mizuno and Gallardo et al, as pointed out above, neither patent discloses or teaches the simultaneous display as recited in the independent and therewith the dependent claims of this application. Accordingly, applicants submit that the proposed combination fails to provide the

claimed features as set forth in independent claims 1, 8 and 18 and therewith the dependent claims of this application. As such, applicants submit that all claims patentably distinguish over this proposed combination of references in the sense of 35 USC 103 and should be considered allowable thereover.

In view of the above amendments and remarks, applicants submit that all claims present in this application should now be in condition for allowance and issuance of an action of a favorable nature is courteously solicited.

To the extent necessary, applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in the fees due in connection with the filing of this paper, including extension of time fees, to the deposit account of Antonelli, Terry, Stout & Kraus, LLP, Deposit Account No. 01-2135 (Case: 501.41125CX1), and please credit any excess fees to such deposit account.

Respectfully submitted,

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